

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
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# PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 29500		Date of mailing (day/month/year) <b>26 MAR 2007</b> <b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. PCT/IL05/00394	International filing date (day/month/year) 14 April 2005 (14.04.2005)	Priority date (day/month/year) 03 May 2004 (03.05.2004)
International Patent Classification (IPC) or both national classification and IPC IPC: <b>A61B 5/05</b> ( 2006.01) USPC: 600/424		
Applicant V-TARGET TECHNOLOGIES LTD.		

1. This opinion contains indications relating to the following items:

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application  |

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 06 March 2007 (06.03.2007)	Authorized officer  John F. Ramirez Telephone No. (571) 272-8685
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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/IL05/00394

**Box No. I Basis of this opinion**

1. With regard to the **language**, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IL05/00394

**Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims <u>2-30, 32-53, and 55-79</u>	YES
	Claims <u>1,31,54, and 80</u>	NO
Inventive step (IS)	Claims <u>2-30, 32-53, 55-79</u>	YES
	Claims <u>1,31,54, and 80</u>	NO
Industrial applicability (IA)	Claims <u>1-80</u>	YES
	Claims <u>NONE</u>	NO

**2. Citations and explanations:**

Claims 1, 31, 54, and 80, lack novelty under PCT Article 33(2) as being anticipated by Front et al. (US 6,567,687). Patent discloses a system and method for an intracorporeal imaging head, comprising: a housing, which comprises: a first optical imaging system, mounted on said housing, adapted to optically image and view a portion of a tissue; and at least one radioactive-emission probe, mounted on said housing, adapted to image radioactive-emission from said portion.

Claims 2-30, 32-53, and 55-79 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a system and method as disclosed in claims 1, 31, 54, and 80 that further comprises a position tracking device, mounted on said housing, in a fixed positional relation with said radioactive-emission probe, for providing positional information for said radioactive-emission probe, wherein said position-tracking device has six degrees of freedom, adapted for obtaining high-resolution, radioactive-emission imaging by collimation - deconvolution algorithms, wherein said first optical imaging system includes: a lighting system, adapted to shine light on intracorporeal objects; an lens, for focusing images of said intracorporeal objects; and a light detecting array, for detecting said images of said intracorporeal objects, comprising a second optical imaging system, adapted for zooming in on suspected pathologies, identified by said first optical imaging system, wherein said second optical imaging system is a video camera, wherein said second optical imaging system is a still camera, wherein said radioactive emission probe is a single-pixel probe, wherein said radioactive-emission probe is a single-pixel, collimated probe, wherein said single-pixel, collimated probe has a tube collimator, a wide-angle collimator, wherein said radioactive-emission probe is a multi-pixel probe, wherein said radioactive-emission probe is a multi-pixel, collimated probe, wherein said multi-pixel, collimated probe has tube collimators, wherein said multi-pixel, collimated probe has wide-angle collimators, wherein said housing is tubular, and said radioactive-emission probe is a multi-pixel probe, with detector pixels arranged radially about a center, each pixel having a collimator.

Claims 1-80 meet the criteria set out in PCT Article 33(4), and thus meet industrial applicability because the subject matter claimed can be made or used in industry.